

The Hemp Industry of the Philippines.

THE prospector seeking for investment need not dig below the surface in the Philippines. The culture and harvesting of hemp is the biggest gold mine he will find. The islands seem to have been especially made for the benefit of the abaca plant. The moist though not swampy country to the south of Manila, the Camarines, Samar, Leyte and Cebu, would produce a solid overgrowth of the abaca trees if left to take its own course.

The tree itself resembles closely the banana palm, but differs essentially in the fineness of its fibre and its barrenness of fruit. The natives, too, seem to have been especially provided for the hemp country. Tending to improvidence and indolence, the hemp industry furnishes them employment whenever they run short of rice and tobacco, for hemp can be harvested almost at any time except during the short rainy season. Attempts have been made to transplant the hemp trees, taking them only as far away as Borneo, but the musa textiles refused to cohabit with any but Philippine soil. The Pacific slopes of the volcanic regions of the islands produce the best plants. Although the abaca tree coddles to thin soil, and rather dry, quickly drained localities, the trunk and leaves demand frequent and abundant moisture. Given the proper conditions, the vast plantations will thrive like asparagus beds. Very little cultivation is required; an occasional weeding and a replanting at the harvest time and nature does the rest. The crop is not gathered as if it were a corn field, but the trees are found in all stages of growth, and the native passes through regular routes, slashing a plant here and there, his practiced eye the sole judge of its maturity. Three years is the proper age for harvesting. The hemp-stripper goes forth much as a huntsman



HARVESTING THE ABACA, OR HEMP PLANT.

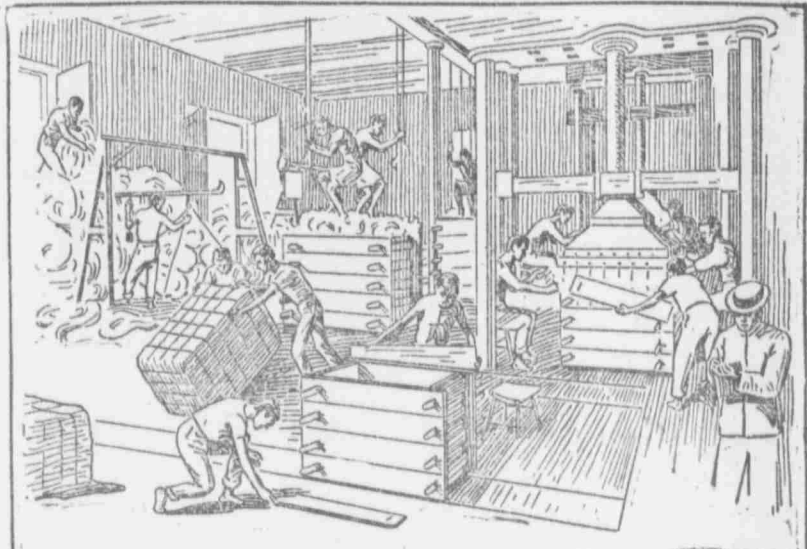
would. With his hole in belt and a bamboo canteen full of rice slung over his shoulder, he lies himself to the uplands. After feeling the plants, which at the age of three years are about ten feet high, he proceeds to clip off a shoot and repant it. After a number of trees are cut the stripping process begins. All the leaves are torn off and the outer skin of the stalk is peeled off. Inside of the trunk is a pithy substance, and around this are layers of fibre imbedded in a soft juicy substance. The fibre must be separated from the stalk at once lest it rot. Many Americans have cherished the idea of exporting the trunk intact, but the enterprise is not feasible because of the perishable nature of the pulpy segment.

A bamboo-made bench is improvised, and at one end the stripper binds his hole; the handle attached to his foot by another bamboo strip. Across the blade he draws the stalk until the fibre is thoroughly separated without injury, preserving its length of from eight to ten feet, and leaving it fine and beautiful that the tropical sun may lick up the moisture still bleeding from the operation. The work of stripping is very tiresome and requires the skill of a trained hand.

The white man has often attempted to improve upon the brown man's method of stripping the hemp, but despite large expenditures and ingenious mechanical contrivances no machine

parts. As well try to produce a machine to comb the snails out of a woman's hair as to make a mechanical hemp-stripper.

The native is paid for his work in hemp, dividing the product equally with the plantation owner. When he cuts and strips all he can carry, he twists up the fibre into a great roll and goes down to the plantation owner's house, and there the division is made. They then hang up the rolls until the middle-man or contractor comes along and a bargain is struck. The bales are crudely fastened together and carried to the nearest port



BALING HEMP.

and shipped usually to Manila, where they are separated, rebaled and shipped either to Hong Kong, where there is an immense rope-walk, or to New York, Boston or London. The rope-walk at Hong Kong is one of the largest in the world. Its product practically supplies China, Japan and Australia. Very little hemp is made into rope or twine in Manila. Although crude rope-walks exist in different parts of the island, their manufactured article, although strong and durable, would not compete in the foreign market. Hemp subserves every purpose that leather might with the native. He twists it into sandals, uses it for harnesses, and it answers for binders in the building of his nipa hut. The utility of hemp is well understood to the Filipino. The finer quality is selected and reserved for weaving purposes, being made up into really handsome cloth, while the ordinary hemp is universally used to make a coarse though durable material, worn generally by the natives, who delight in gaudy colors and picturesque though scanty costumes. There is still another texture woven from the selected strands of outer fibre, intermixed with the fibre of the pine-leaf. The cloth has the semblance



DRYING HEMP ON A MANILA WHEEL.

of unfinished silk, and is pretty and durable, though not as beautiful or dressy as the pure pine-leaf fibre silk known as pina cloth, the best woven product of the islands.

The entire hemp industry of the Philippines is still worked by primitive methods and with simple contrivances. The native, though unambitious himself, is jealous of the Chinaman, and is averse to the Celestial getting control of the plantations or contrivances, while scornful of up-to-date methods himself. The "Cheno," however, has made inroads in this industry, as well as in others in the Philippines. Had he not, the development would



UNLOADING HEMP AT CEBU.

has been produced that takes the place of the native. Patents have been taken out, and large sums of money spent upon experimental machines, but the texture and peculiar nature of the abaca plant seem to require the touch of human hands to separate its

not have been as rapid as it has. The native is thoroughly capable, and understands the treatment of the plant and its harvesting, and could be induced to work with regularity would be as good a laborer as the Chinaman, but the Celestial usually controls

the baling and local marketing of the hemp.

The presses at the seaport towns are crude affairs. After the fibre is classified and separated into three piles or classes, it is dumped in bulk into a huge press and a screw applied. After this operation it is taken out and put into another press of more regular design and of more imposing character. The second press is operated by an eight-armed capstan on an overhead platform, and a score or more of naked coolies, usually Chinese, push it around. The sight is most amusing. With grunts, laughs and confused jargon and rallery they urge each other on and manage to bring their strength together at loudly accentuated periods. A good-sized press will turn out 300 to 400 bales a day, and in the course of a year a million or more bales are prepared for shipment. In Cebu large quantities are handled, principally the products of Leyte and Samar, although in Manila the largest presses are in operation.

The classification of hemp requires the skill of an old hand, and the experienced eye of a buyer who knows all

the tricks of the trade. The native will bring his hemp down from the plantation in a moist state and offer it for sale at night, hoping thus to fool the middle-man as to weight and quality, but as this part of the business is mostly in the hands of the Chinese, there is little danger that they will be deceived or cheated. The Chinaman is the sharpest bargain-driver in the world, and whether it is hemp, silk or old junk, he is fully capable of looking after his interests. Fineness of fibre, color, strength and length determine the value and grade of hemp. If it be carefully stripped over a smooth knife, immediately and thoroughly dried, and of good length, it will bring the highest price. If it be carelessly stripped, juice being left in the fibre, it loses its color and becomes coarse. It then is considered of a second and third grade quality and brings a smaller price. The native watches the market, and if he hears that the demand is heavy he takes advantage of the middle-man and compels him to pay first-grade prices for second and third grade products. Formerly hemp brought in Manila from \$70 to \$150 per ton, always fluctuating according to the supply, at times going up to \$300 per ton, but at present the price is practically prohibitive, and it looks as if it would remain so for the next two years.—Edwin Wildman, in Harper's Weekly.

Wild Sheep Shooting.
The sheep began to move toward us. It had been a long climb to get beyond and above them, but now we had our reward. On they came, only two hundred yards away. I could see their white muzzles as though they had been sticking their noses into a flour bag. Now I could see the wrinkles in the horns of the rams. The hoofs of the advancing flock made a swishing, pattering sound, and they were only fifty yards away. I took the nearest ram, and he never drew breath again. Johnnie's forty-four barked spitefully. He made a neat hit on another ram, further away than my already dying victim, but failed to stop it. Those sheep did not sail away like deer, touching here and there a high place. They flattened themselves out, shot around a corner, and were gone. Johnnie followed, and I was alone. In a few seconds I heard Johnnie's gun feebly thumping away. There was no echoing roar, such as you hear in the thick woods. I picked my way cautiously after Johnnie, and the chances he had taken, I knew there was much for me to learn about hasty mountain travel. Johnnie shot six times, and two hundred yards ahead, on the crooked, rocky descent the sheep had taken. I found him on his knees by the big ram. Three bullets had struck.—Scribner's.

The Fat Man's Pre-Eminence.

We are pretty sure for long generations of seeing the preponderance of northern races. One of their peculiarities is that of being heavy eaters. This is inconsistent with a clean-built figure. The modern capitalist rarely comes from a climate like that of Athens or Naples. He fortifies himself against the long winters of New York, London, Amsterdam, Berlin and Frankfurt by substantial and oft-recurring meals. His body is a quick-combustion stove wrapped up in warm garments that prevent light, easy motion. Men of the money-making class have considerable girth of waistcoat.—London Truth.

The tonnage of the whole mercantile steam marine of Russia, Japan or Holland does not equal the tonnage of the merchant vessels taken over by the English government as transports.

DOGS GO IN SHOE LEATHER.

Canine Footgear as Worn in the Klondike.

One of the greatest dangers confronting travelers in parts of the world where dogs take the place of horses is that the dogs which draw sleds or transport goods may freeze their feet by contact with ice, and so injure them



A DOG SHOE FOR KLONDIKE WEAR.

that the animals become practically useless, and must be abandoned, to the endangerment of the life of the traveler who has put his trust in canine motive power.

As a precaution against misfortune of this kind it has been a common thing to wrap the dog's feet in cloth, a piece of leather or rubber. At best all of these, however, were crude and poorly adapted to carry out the desired object. They protected the dogs' feet, but at the same time interfered with the free use of their legs. The development of the Klondike has given special impetus to the demand for some proper protection for dogs' feet.

The dog's shoe, of which the accompanying photograph was sent from the far Northwest to Shoe and Leather Facts, is made of chrome tanned elk leather, and the upper of calf, making a soft, pliable and yet comfortable shoe. There is a tongue at the back, and the lacing is at the back of the leg instead of on the front, because a dog's knee bends just opposite from a man's.

The dogs, it is said, take very kindly to these shoes. They become so accustomed to wearing them that they don't like to go without them, with the result that on the trail they will often come up to the driver in the morning and hold out their legs to have their shoes put on, not unlike children. If by chance the shoes should be laced too tight, they will whine and speedily make manifest their discomfort, wagging their tails with joy when the shoes are laced to their liking.

A VEGETABLE CORTORTIONIST.

Queer Freak of a Little Sprig of Dog's Mercury.

These two pictures relate to an extraordinary occurrence that befell a plant of dog's mercury growing in Charterhouse Copse, in England. A



HOW THE PLANT LIFTED THE NUT.

hazel nut had been attacked by a nut-batch and a clean round hole made in it at one end—the marks of the blows of the bird's beak being clearly visible in the actual specimen. The nut was dropped by the bird after the kernel had been removed and happened to fall to the ground with the hole downward. Into this hole grew the tip of the sprouting dog's mercury, and finding itself in a blind alley the plant was compelled to describe a complete circle within the cavity of the nutshell and to emerge at the same hole as that by which it had entered. Having ex-



HOW STEM CURVED THROUGH NUT.

ecuted this gymnastic feat the plant seems to have got along quite happily, for all its upper leaves are quite normal, though one of its lower leaves had to twist itself uncomfortably to get out to the light of day. The plant lifted the nut several inches off the ground as it grew.

How Camels Act in Water.

Camels cannot swim. They are very buoyant, but ill-balanced, and their heads go under water. They can, however, be taught to swim rivers with the aid of goatskins or jars fastened under their necks. During the Beluchistan expedition of 1898 the camels were lowered into the sea from the ships and the drivers plunging overboard, clambered on the rumps of their charges, causing the animals' heads to come up, and thus assisted they were successfully piloted ashore.

Good Roads Notes

In New York.

THE road improvement law, passed by the New York Legislature in 1898, has proved so efficacious that the good road division of the United States Department of Agriculture considers it the best State law in existence. It possesses most of the desirable features of State aid laws in other States, and but few of the objectionable ones.

The law is known as the Higbie-Armstrong law, and provides that any Board of Supervisors may adopt resolutions asking State aid for road improvement. These are sent to the State Engineer, who investigates and determines whether the road indicated is of sufficient public importance to receive State aid. If it is, he prepares an estimate of the cost and transmits this to the Board of Supervisors. The board may then declare that the highway indicated is to be improved, or may refuse to go any further. This gives absolute home rule to the different counties of the State, so that no section can be compelled to improve its highway and no county should be permitted to do so until all the facts and figures are placed before it.

If the Board of Supervisors decides to improve the road a second set of resolutions are adopted and sent to the State Engineer, who then advertises for bids. When a responsible bid within the engineer's estimate is made the contract is closed. If the town or county desires to do the work itself it has the preference over all other bidders. The work is superintended by the State Engineer, and when it is completed he draws a warrant upon the State Treasurer for fifty per cent. of the cost of the work. The Supervisors must levy thirty-five per cent. of the cost on the whole county, and the remaining fifteen per cent. is payable in one of two ways, viz.: If the Supervisors had decided to improve this highway without a petition from the farmers owning land which fronted on the improved road, the fifteen per cent. must be paid by the township in which the highway lies. If, however, the decision was made after the petition by the landholders, this fifteen per cent. is paid by the property owners. For example, if road improvement in a certain town costs \$1000, \$500 must be paid by the State, \$350 by the county and \$150 either by the town or the citizens having land fronting upon the improved road. The money available for the State road work is obtained by a tax of 1.1c. on every \$1000 worth of assessable property in the State, which amounts to about \$50,000 a year.

This law is strictly for the benefit of rural highways, for although the cities and villages of the State pay ninety per cent. of the taxes, not a foot of the highway within their limits can be improved. This may at first seem an injustice to the village, but when it is remembered that the prosperity of villages and cities is dependent entirely upon the prosperity of the country surrounding them, the fairness of the plan is evident.

Co-operation Proposed.

Some months ago the Farm, Field and Fireside published an editorial entitled "The Bicycle for the Farmer." The special point was made that the wheel was already in the farmer's family; that it had been found practically useful in many ways, saving the tired horse or horses from a trip to town or the postoffice after a hard day's work, often saving time, which is money, in innumerable ways, besides being a great convenience. Another point made was that the bicycle is a blessing socially for the women of the household as well as for the men, young and older. It is used to go to church, to the grange or lodge, and is a promoter of neighborhood feeling and sociability.

The bicycle is now so much cheaper than formerly that every well-to-do farmer can have one or more. The points summarized were that to have a wheel is: (1) Good economy; (2) healthful recreation; (3) promotes social life; (4) a constant convenience.

Now, every argument which justifies the farmer in having a bicycle is an argument for good roads, and it can be duplicated and reinforced by the fact that what is good for the bicycle is good for the buggy or family carriage of every kind and for the farm wagon.

In short, the wheelmen and farmers can join hands and heads in promoting good roads. It goes without saying that with improved roads such as they have in some parts of New York and Pennsylvania and in many parts of Europe, our farmers would make a large saving on their wheeled vehicles of every kind and on their horses, who are worn out and broken down as much by bad roads as by any other cause.

Good roads for winter and summer and at all seasons give the farmer the chance to market his produce at the moment when prices are best; he also can make his purchases when prices are most favorable, and take advantage of bargain offers for his family.

Our purpose in touching upon these reasons for good roads at this time is to bespeak a hearty co-operation between the farmers and all residents of rural districts and the League of American Wheelmen. If these two great forces can only co-operate there need not be a neighborhood in the whole country cursed and kept back in material and social progress by bad roads.

WHEN YOU WANT—
Absolutely Pure Whiskey.
Direct from the Distillery, call on
THOMAS WELLS,
Glendale, Maryland.
Wholesale of Pure Liquors, Beer, Wine, Tobacco, Cigars, &c.

WM. J. LATIMER,
SURVEYOR,
27 MONROE ST., ANACOSTIA, D. C.
Subdivision of Suburban Property a Specialty.

B. F. CHINN,
Dyeing & Hair-Dressing
—SALOON—
East Side Maryland Ave.,
Hyattsville, Maryland.

EDWARD L. GIES,
Attorney - at - Law,
Rooms 32 and 33 Warder Building,
S. E. Cor. F and 9th Streets N. W.
WASHINGTON, D. C.

THOMAS W. SMITH,
Lumber : Merchant,
SASH, DOORS, BLINDS, GLASS
AND MILL WORK.
WASHINGTON, D. C.
Office, 1st St. and Indiana Ave. N. W.
Mill, Foot 2nd Street S. W.
Wharf, 4th St. Eastern Branch.

JOHN APPICH,
Beer, Whiskey
AND Wine Merchant,
1309 11TH STREET, S. E.
WASHINGTON, D. C.
Oakmont and Silver Brook Whiskies
—A SPECIALTY—

50 YEARS' EXPERIENCE
PATENTS
TRADE MARKS
DESIGNS
COPYRIGHTS & C.
Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the
Scientific American.
A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, \$3 a year; four months, \$1. Sold by all newsdealers.
MUNN & Co. 361 Broadway, New York
Branch Office, 25 F St., Washington, D. C.

THE SUBURBAN CITIZEN is a permanent institution—a fixture at the National Capital. Thousands and thousands of people can testify to the good work it has accomplished during the past five years in the line of suburban improvement. It is the only newspaper in the District of Columbia that maintains a pouncing battery whose duty it is to punch up the authorities and keep them awake to the needs of the suburbs. On that account it deserves and is receiving substantial encouragement.

JUDICIOUS ADVERTISING PAYS.

THE NATIONAL GAME.
The Brooklyn Club has released Pitcher Weyhing.
Slow-thinking ball players are dead weight to a club.
Brooklyn has six ball players who have stolen over twenty bases each.
Hartel, of Cincinnati, is undoubtedly the smallest player in the League.
Young and Benson, of St. Louis, are the oldest and heaviest battery in the League.
The Brooklyn's have won thirteen out of seventeen games from the Bostonians this year.

It is said that there will be an upheaval at Boston before another pennant race begins.
Holmes, the old Baltimore player, has a batting average this season in the West of .306.

Beckley, of Cincinnati, has never played more brilliantly nor batted better than he has this year.
Though in last place, the percentage of the New York team exceeds that of last season by many points.
Bernard, recently signed by the New Yorks, is an outfielder of no mean ability and acts like a natural born hitter.

Wagner's great batting, fielding and base running are largely responsible for Pittsburgh's high position in the pennant race.
It is claimed that Louisville, Toronto and Toledo are all knocking hard at the door for admission to the American League next season.

It is rumored that John T. Brush will recall Pitcher Hawley and Outfielder Selsbach from the New York Club in order to strengthen the Cincinnati's for next season.
It has been suggested as a remedy to stop kicking and delay on the part of players that the umpire receive power to call a batsman out who doesn't step to the plate inside of a given time.